I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4).

Dated: April \_\_\_\_, 2010

Signature: (David A. Gass)

Docket No.: 28113/39467A

8113/39467A (PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Kari Alitalo et al.

Application No.: 10/567,630

Confirmation No.: 2853

Filed: May 30, 2006

Art Unit: 1642

For: MATERIALS AND METHODS FOR

COLORECTAL CANCER SCREENING,

DIAGNOSIS, AND THERAPY

Examiner: S. T. Kapushoc

## **DECLARATION PURSUANT TO 37 CFR §1.131**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

- I, Tatiana Petrova, Ph.D., hereby declare and state as follows:
- 1. I am one of the inventors of the invention presently claimed in the above-identified patent application. I understand that the United States Patent and Trademark Office (PTO) has rejected one or more claims of the application based, at least in part, on the disclosure of Parr and Jiang, "Quantitative analysis of lymphangiogenic markers in human colorectal cancer," *International Journal of Oncology*, 23: 533-539 (2003), which the PTO says was publicly available as of 17 July 2003. I understand that this reference is cited as prior art to the extent that it describes the invention "before the invention thereof by the applicant for patent." I make this declaration to provide evidence to PTO the that the inventors had performed research and possessed at least as much information relevant to the invention as shown in Parr (2003), before the July 2003 publication date of Parr (2003).
- 2. Attached hereto as Exhibit A is an invention disclosure document that my coinventors and I prepared before July 2003, summarizing work that we had performed in our laboratory and conclusions that we had drawn from our work. We communicated this

invention disclosure document to US patent counsel at Marshall Gerstein & Borun before July 2003 and received facsimile confirmation that it was received and understood.\

- 3. The PTO cited Parr (2003) for its teaching of elevated Prox-1 mRNA in colon cancer as compared to normal colon mucosa. Our invention disclosure document describes that we measured Prox-1 mRNA in colorectal tumor samples and matched normal controls, and that elevated Prox-1 mRNA was measured in 35/53 colorectal tumor samples measured (70%). In contrast, no increase in Prox-1 was measured in several other types of tumors that we tested. We also describe experiments where we analyzed the types of cells that were expressing Prox-1, and experiments that showed elevated Prox-1 expression in the SW480 colon cancer line. We provided a hypothesis for how Prox-1 over-expression can contribute to colon cancer progression, and conceived that Prox-1 targeted therapy can be beneficial in the treatment of this type of cancer.
- 4. Attached as Exhibit B is a draft manuscript that we communicated to the owner of the patent application, Licentia Ltd. And that Licentia communicated to US patent counsel at Marshall Gerstein & Borun before July 2003. The manuscript describes and expands upon the experiments summarized in the invention disclosure attached as Exhibit A. In addition to the experiments described in the invention disclosure, the manuscript describes experiments in which we used siRNA to suppress Prox-1 in a highly malignant subclone of the SW480 colon cancer cell line. Suppression of Prox-1 resulted in grown arrest. These findings further supported our idea that suppression of Prox-1 may prove beneficial in the treatment of colon cancer.
- 5. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: May <u>3</u>, 2010

TATIANA PETROVA, PH.D.

By